

Resource

Ecodesign: A Manual for Ecological Design

Yeang, Ken. *Ecodesign a Manual for Ecological Design*. Chichester: Wiley, 2006. Print. Book

This manual offers clear instructions on how to design, build and use a green sustainable architecture. *This book also* provides a comprehensive set of strategies for approaching ecological design and planning combined with in-depth analysis and research material not found elsewhere.

My design need to base on the basic information about structures and systems that are low consumers of non-renewable resources, built with materials that have low ecological consequences and are designed to facilitate disassembly. Meanwhile, this book provides the source of the comparison of different construction materials on their performance of energy consumption as well as basic guidelines of choosing materials and building geometry.

Wind Energy in the Built Environment

Mertens, Sander. *Wind Energy in the Built Environment*. Essex, U.K.: Multi-Science, 2006. Print.

This book describes the wind resources in the built environment that can be converted into energy by a wind turbine. It especially deals with the integration of a wind turbine and a building in such a way that the building concentrates the available wind energy for the wind turbine. The three different ways to concentrate wind power are examined: wind turbines on the roof or at the sides of a building; wind turbines between two airfoil shaped buildings; wind turbines in ducts through buildings.

As my project will created an on -site energy generation system, use wind source and solar source, I found this book is specifically suitable for my project because this book focus wind energy conversion on the built environment, making use of the concentrator effect of buildings, it introduce the basic knowledge of this technology as well as the practical examples, so I consider this book a basic source for design.

Catalogue Foster and Partners

Foster, Norman, and David Jenkins. *Catalogue Foster and Partners*. München [u.a.: Prestel, 2005. Print.

This book Traces the dominance of the Architect's studio and shows Foster's past and present projects. Many of these aesthetically and technologically groundbreaking projects are based on ecology -conscious concepts, setting new standards for the interaction of buildings with their environment.

This book contains many recent Norman foster's works which I think these projects are excellent examples of eco strategies and new technology in architecture. Norman's design usually resolves the social, environmental and economical problems very well. By learning the good ideas that drove in Norman's projects, I think I could begin my design on a more practical level.

Light Structures: Jorg Schlaich, Rudolf Bergermann

Bogle, Annette, Peter Cachola. Schmal, and Ingeborg Flagge. *Leichtweit = Light Structures : Jorg Schlaich, Rudolf Bergermann*. Munich: Prestel, 2004. Print.

Schlaich and Bergermann's, structural engineers who are pioneers in sustainable and ecological construction, in their work, innovative structural concepts is the product of an interdisciplinary creative process that links knowledge and intuition, science and pragmatism.

This book is an extensive selection of their works, including towers, bridges, roof structures and facades, demonstrate how their innovative designs minimize material input and thus meet the designation "light structures."

As to guarantee a eco-friendly high rise building, the light weight structure system means the least use of construction mass and a high quality of construction, this book could provide me the information on how to create a highly performance structural system which reduce the materials to the limit as well as update or demolish without energy waste.

Construction Materials Manual

Hegger, Manfred. *Construction Materials Manual*. Basel: Birkhäuser, 2006. Print.

Construction Materials Manual is an overview of materials for architects that considers the importance of the sensory perception of architecture including tactile qualities, smell, color, and surface structure. It also addresses fundamental questions of sustainability including life span, environmental impact, and material cycles.

To guarantee a highly sustainable building, this choose of materials is very important, I need the information of the principal conventional and innovative construction materials as well as the production, manufacture, fabrication, treatment, surfaces, connections, and characteristics. This book showed this information clearly that could help me to make decision.